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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WANG, LIANG CHE A

ART UNIT PAPER NUMBER

2155

DATE MAILED: 12/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/541,390

Applicant(s)

SPANGLER ET AL

Examiner

Liang-che Alex Wang

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/31/2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/31/2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-24 have been examined.

Paper Submitted

2. It is hereby acknowledged that the following papers have been received and placed of record in the file:
 - a. **Information Disclosure Statements** as received on 06/08/2000.
 - b. **Change of Address** as received on 08/01/02.

Priority

3. The drawings in this application are objected to by the Draftsperson as informal. Any drawing corrections requested, but not made in the prior application should be repeated in this application if such changes are still desired. If the drawings were changed and approved during the prosecution of the prior application, a petition may be filed under 37 CFR 1.182 requesting the transfer of such drawings, provided the parent application has been abandoned. However, a copy of the drawings as originally filed must be included in the 37 CFR 1.60 application papers to indicate the original content.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a) because they fail to show English description as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in

the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. **Please provide English description labels to elements 13,15,19,21,27 and 29 in Figure 4.** The objection to the drawings will not be held in abeyance.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
6. The disclosure is objected to because of the following informalities: the text for the heading "**Brief Summary of the invention**" (Page 1), is not included in the specification as required by Patent Rule 1.73.

A brief summary of the invention indicating its nature and substance, which may include a statement of the object of the invention, should precede the detailed description. Such summary should, when set forth, be commensurate with the invention as claimed and any object recited should be that of the invention as claimed. (See MPEP 608.01(d)). Applicant is required to restrict the brief summary of the invention to descriptive matter so as to be in harmony with the claims (MPEP 1302.01). Appropriate correction is required.

Claim Objections

7. Claims 6-7 are objected to because of the following informalities:

- a. In Claim 6, line 5, "**a least a portion**" should be changed to "**at least a portion.**"
- b. All dependent claims are objected to as having the same deficiencies as the claims they depend from.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 1, 3, 6-8, 10, 13-15, 17, 20, 21, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Aras et al., US Patent Number 5,884,037, hereinafter Aras.

10. Referring to claim 1, Aras has taught an method comprising:

determining whether information scheduled to be broadcast digitally is utilizing all bandwidth previously allocated to broadcasting the information; and if not, broadcasting additional information using an unused portion of the previously allocated bandwidth. (Col 2 lines 20-64, the system determined the bandwidth is not fully utilizing (only used 5Mp/s out of total 10Mp/s bandwidth,) so the system is able to allocate the additional bandwidth (2Mp/s) using the unused portion of the previously allocated bandwidth.)

11. Referring to claim 3, Aras has taught an invention as described in claim 1, Aras has further taught the method of claim 1 including determining in real time whether additional information can be broadcast over a portion of the previously allocated bandwidth that is actually unused. (Figure 14, block 1403 determines if the requested bandwidth is less than available bandwidth, and if yes then allow the connection and broadcast the information, if not then deny the request.)
12. Referring to claim 6, Aras has taught an invention as described in claim 1, Aras has further taught the method of claim 1 including determining in real time whether there is any unallocated bandwidth; and, if there is unallocated bandwidth with respect to a particular timeframe, broadcasting supplementary information to occupy at least a portion of the unallocated bandwidth during the particular timeframe. (Col 10 lines 48-57, the system is able to know if the bandwidth will be available at time t_r , and allow this time frame (times between t_r s could be considered as time frames) to be occupied by another client request.)
13. Referring to claim 7, Aras has taught an invention as described in claim 6, Aras has further taught the method of claim 1 including determining in advance of the

particular timeframe whether the supplementary information can be broadcast over the unallocated bandwidth. (Figure 17, and Col 10 lines 48-57, connection agent informs the client that the bandwidth is available at tr. If the connection agent is able to inform the client when the bandwidth is available, the system is able to determine in advance when the bandwidth will be available so the supplementary information can be broadcast over the available (unallocated) bandwidth.)

14. Referring to claim 8, Aras has taught a digital communication system (see title) comprising:

an automated management system (abstract line 1, bandwidth management system is an automated management system,) that controls scheduling of digital broadcasts (Col 10 lines 62-64, the system controls the model to schedule a application at a appropriate time to broadcast.) and is configured to determine whether information scheduled to be broadcast (Col 2 lines 26-27, 5 Mp/s is information to be broadcasted) utilizes all bandwidth previously allocated to broadcast the information (10 Mp/s is the total bandwidth, and 5 Mp/s is previous allocated (conformed) to broadcast the information,) and if not (Col 2 lines 36-48), to broadcast additional information (2 Mp/s) using an unused portion of the previously allocated bandwidth (using 2 Mp/s out of the unused 5 Mp/s bandwidth.)

15. Referring to claims 10,13-14, Aras has taught an invention as described in claim 8, and claims 10,13-14 encompass the same scope of the invention as that of the

claims 3, 6-7. Therefore, the claims 10,13-14 are rejected for the same reason as the claims 3, 6-7.

16. Referring to claims 15, 17, and 20, claims 15, 17, and 20 encompass the same scope of the invention as that of the claims 1, 3, and 6. Therefore, the claims 15, 17, and 20 are rejected for the same reason as the claims 1, 3 and 6.

17. Referring to claim 21, Aras has taught a digital communication system comprising:

a bandwidth pipe operable to transport digital information; (see abstract)

a monitor to determine bandwidth usage in the bandwidth pipe; (Figure 14, block 1403 provides a monitor to determine the usage in the bandwidth pipe, also see Figure 6.)

a system manager to broadcast additional information if there is available bandwidth in the bandwidth pipe, using an unused portion of the previously allocated bandwidth. (See Figure 14)

18. Referring to claim 23, claim 23 encompasses the same scope of the invention as that of the claims 21. Therefore, the claim 23 is rejected for the same reason as the claim 21.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 2, 4, 5, rejected under 35 U.S.C. 103(a) as being unpatentable over Aras in views of Hall et al., US Patent Number 5,502,370, hereinafter Hall.

21. Referring to claim 2, Aras has taught an invention as described in claim 1, Aras has further taught the method of claim 1 further comprising limiting the amount of additional information to a preset limit. (Col 9, lines 53-61)

Aras has not explicitly taught the preset limit is the preset percentage of the total available bandwidth.

However, Hall has taught the use of preset percentage of the total available bandwidth to be the preset limitation. (Col 5 lines 28-30)

A person with ordinary skill in the art would have recognized that the using the preset percentage as a preset limit is easy for people to read and understand. For example,

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to have Aras using a preset percentage of the total available bandwidth to be his bandwidth limitation as taught by Hall. Because using percentage, is easy for people to read and understand.

22. Referring to claim 4, Aras in views of Hall has taught an invention as described in claim 2, Aras has further taught wherein said broadcasting the portion of the additional information is stopped when the preset percentage is reached, (Col 9, lines 57-61)

23. Referring to claim 5, Aras in views of Hall has taught an invention as described in claim 6, Aras has further taught wherein said broadcasting the portion of the

additional information to be stopped is selected based upon at least one of content provider, bandwidth range and sequence of content provision. (Col 9, lines 57-61, if no bandwidth is available, the connection will not be setup for broadcasting, and content provider (application server) will not be able to broadcast information since there is not enough bandwidth available for broadcasting.)

24. Referring to claims 9, 11 and 12, Aras has taught an invention as described in claim 8. And claims 9, 11 and 12 encompass the same scope of the invention as that of the claims 2, 4 and 5. Therefore, the claims 9, 11 and 12 are rejected for the same reason as the claims 2, 4 and 5.
25. Referring to claims 16, 18 and 19, Aras has taught an invention as described in claim 15. And claims 16, 18 and 19 encompass the same scope of the invention as that of the claims 2, 4 and 5. Therefore, the claims 16, 18 and 19 are rejected for the same reason as the claims 2, 4 and 5.
26. Referring to claim 22, Aras has taught an invention as described in claim 21. And claim 22 encompasses the same scope of the invention as that of the claim 2. Therefore, claim 22 are rejected for the same reason as the claim 2.
27. Referring to claim 24, Aras has taught an invention as described in claim 23. And claim 24 encompasses the same scope of the invention as that of the claim 2. Therefore, claim 24 are rejected for the same reason as the claim 2.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is reminded that in amending in response to a

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rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objection made.

Applicant must show how the amendments avoid such references and objections.


See 37 CFR 1.111(c).

29. Rao, US Patent Number 5,940,738 has taught a video pedestal network that offering opportunistic service when there is bandwidth available. (Col 19)
30. Mitsutake et al., US Patent Number 6,240,460 B1, has taught a system for data transmission accordance with the form of the data transmission based on control information exchanged between applications of a data transmitter and a data receiver before data transmission is started.
31. Delp et al., US Patent Number 5,996,013, has taught a method for resource allocation with guarantees.
32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liang-che Alex Wang whose telephone number is (703) 305-8159. The examiner can normally be reached on Monday thru Friday, 8:30 am to 5:00 pm.
33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on (703) 305-9648. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

34. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9000.

Liang-che Wang
December 3, 2002

lw


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